Granite Comparator Stand

Introduction

To take full advantage of this instrument, read this manual thoroughly first. After reading it, retain this manual for future reference. The product specifications and the information in this manual are subject to change without notice. Warranty: In the event that the Mitutoyo Comparator Stand should prove defective in workmanship or material, within one year from the date of original purchase for use, it will be repaired or replaced, at our option, free of charge upon its prepaid return to us. Please contact your Mitutoyo office.

Export Control Compliance

The goods, technologies or software described herein may be subject to National or International, or Japanese Export Controls. To export directly or indirectly such matter without due approval from the appropriate authorities may therefore be a breach of export control regulations and the law.

On Various Types of Notes

IMPORTANT

•Type of note that provides information essential to the completion of a task. You cannot disregard this note to complete the task.
•An important note is a type of precaution, which if neglected could result in a decreased accuracy or instrument malfunction/failure.

NOTE

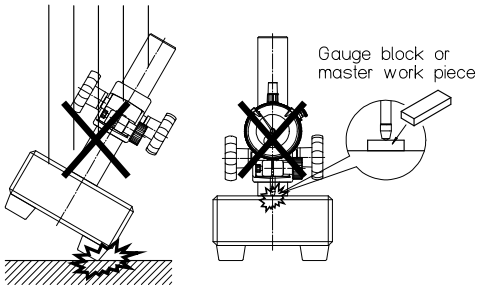
•A note emphasizes or supplements important points of the main text. It also supplies information about specific situations.

■ Operating Environments

- Use this stand carefully and in an environment in which the operating temperature is between 0 and 40℃ and the humidity is between 30 and 70%RH with no condensation.
- Use this stand at a site with a minimum amount of dust, oil, and oil mist, and which is not direct exposed to sunlight.

■ Precautions for Use

- Exercise due caution so as not to drop or upset this stand. If the stand receives a blow due to a drop, etc., check its performance and accuracy before use.
- Confirm that the bracket slides up and down smoothly. Check the screws on each part mounting portion for looseness.
- Never leave moisture and oil on the granite base. Wipe them off using a dry, soft cloth. It may cause accuracy deterioration.
- Do not impose concentrated loads on a local point. The surface of the granite base will be chipped and it may adversely affect on the measurement. During the measurement, if the shock is given to the surface of the granite base by the contact point as shown in the figure right, it will cause a breakage of the indicator or the surface of the granite base. Care must be taken not to bring the contact point directly into contact with the surface of the granite base repeatedly. When you perform zero setting of the indicator, it is recommended to use the gauge block or the master workpiece shown in the figure right. If it is necessary to bring the contact point directly into contact with the granite base, care must be taken not to drop the contact point on the surface of the granite base with a shock.



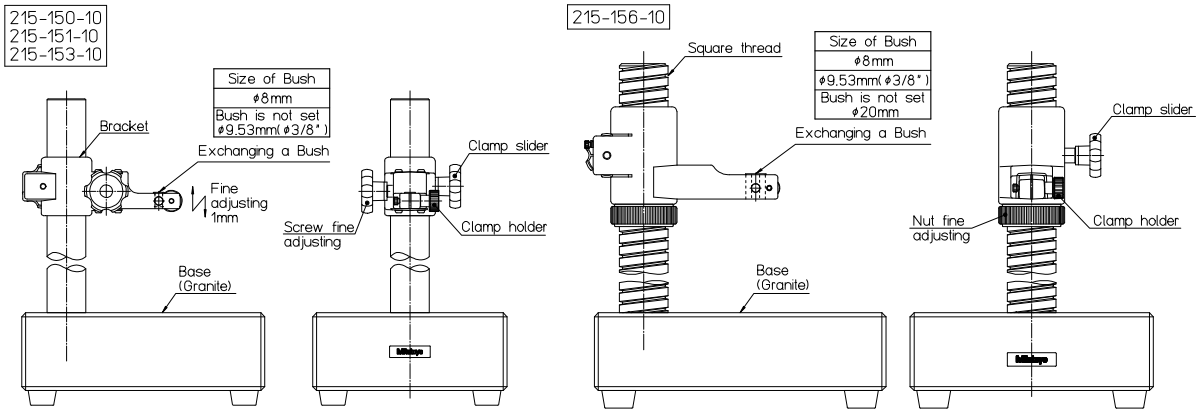
- If the top face of the granite base is slightly scratched due to frequent contact with the contact point, prior to use rotate the bracket so as to keep the contact point away from the dented position.
- The warranty will be voided if this product has been subject to repair, disassembly, or modification by the user or any third party.

■ Name and Usage of Each Part

○ This comparator stand is intended to mount a Dial indicator or a Digimatic indicator (sold separately) and measure an external diameter, thickness, step, etc., of a work piece highly accurately and quickly.

○ As for the operating procedure, first unclamp the column clamp knob while holding the bracket by hand, slide the bracket up to the vicinity of the column top, and then clamp the column clamp knob again to secure the bracket. Loosen the dial clamp to insert the stem of a Dial/Digimatic indicator into the bracket, and then tighten the dial clamp to secure the indicator. Loosen the column clamp knob and slide down the bracket until the contact point of the Dial/Digimatic indicator comes into contact with the granite base or gauge block etc. To prevent the bracket from dropping rapidly at this time, be sure to lower the bracket slowly while holding it by hand.

○ For products (No.215-150-10 or 215-151-10 or 215-153-10) which have a fine-feed mechanism at the bracket end, you can finely feed the indicator up or down with the fine-feed knob while leaving the column clamp knob clamped. Finely adjust the measuring position by turning the fine-feed knob. For products (No. 215-156-10) which finely feed the bracket with a square thread, move the bracket up or down using the fine-feed nut while leaving the column clamp knob unclamped. Adjust the fine-feed nut and clamp the column clamp knob again at the required bracket position.



- When it is required to change a size of Bush, exchange it after loosening the screw that prevents Bush's movement.
- Preserve exchanged or removed parts etc. carefully so as not to lose it.
- Be sure to hold a bracket with a hand to move the bracket. It may damage the granite base or column if it is falling freely.

■ Maintenance/Inspection

- Wipe dirt from the granite base with a dry, soft cloth or a cloth dampened with a small amount of alcohol.
- The column etc, is rust-prone. If the stand will not be used for an extended period of time, apply rust-preventive oil to the column and store the stand in a place with minimum humidity.
- The performance deterioration of this stand depends greatly on the operating conditions. It is recommended that the client prescribe the maintenance period as a company standard, etc., taking the frequency of use, environment, usage, and other conditions into account and inspect the stand periodically.

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